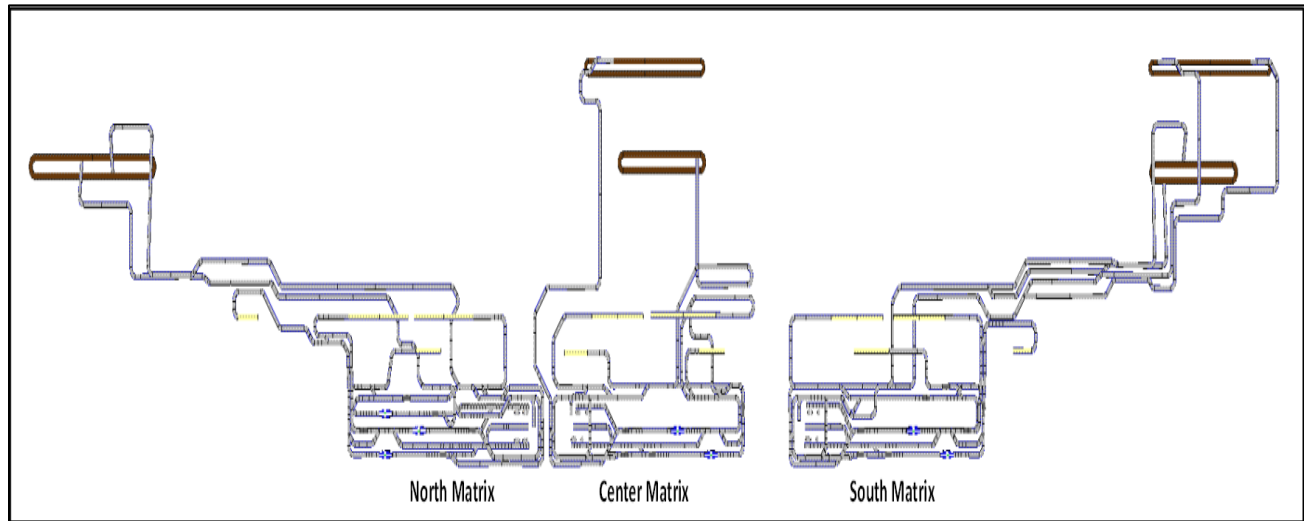




Ronald Reagan Washington National Airport 100% Design Checked Baggage Inline System Evaluation



DCA Checked Baggage Inline System

Client Name: URS

Date Started: July 2006

Date Completed: May 2011

TransSolutions analyzed and evaluated the expected performance of the final system design for the Checked Baggage Inspection System (CBIS) at Ronald Reagan Washington National Airport (DCA). The CBIS design by URS consists of three separate matrices, with a dedicated system serving each of the three concourses in the main terminal. All of the systems incorporate the use of high-volume Explosive Detection Systems (EDS).

In 2006-2007, TransSolutions supported URS by evaluating and refining design options from initial concept through the 60% design submittal to TSA. Throughout this process, TransSolutions worked closely with URS to quantify the performance of each option considered and to recommend design modifications to improve the overall design.

When the 60% design evaluation was completed in 2007, there were no certified high-speed EDS machines, and the TSA had yet to issue their Planning Guidelines and Design Standards (PGDS). In the review of the final 100% design, TransSolutions updated the CBIS model and evaluated the final design of the system with respect to current PGDS recommendations and requirements. TransSolutions also worked with URS to develop a fault mode control strategy to divert bags to alternate EDS lanes in all matrices in order to maximize system throughput during fault conditions.